

## An updated PubMed is on its way!

- Closed captioning: [www.ccaptionedtext.com](http://www.ccaptionedtext.com) & enter 4116512.
- The **recording of this webinar** will be on our YouTube channel in the Webinars playlist in a few days: [youtube>/user/NCBINLM/playlists](https://www.youtube.com/user/NCBINLM/playlists)
- Type in the **Questions Pod** to ask questions when you think of them.  
*Don't wait until the end.*
- If we don't get to your question today, use the Feedback button in PubMed Labs for questions/comments: [pubmed.gov/labs](http://pubmed.gov/labs)
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<ncbi> = www.ncbi.nlm.nih.gov  
<ftp> = ftp.ncbi.nlm.nih.gov  
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## An updated PubMed is on its way!

Marie Collins

August 14 & 28, 2019

## Agenda

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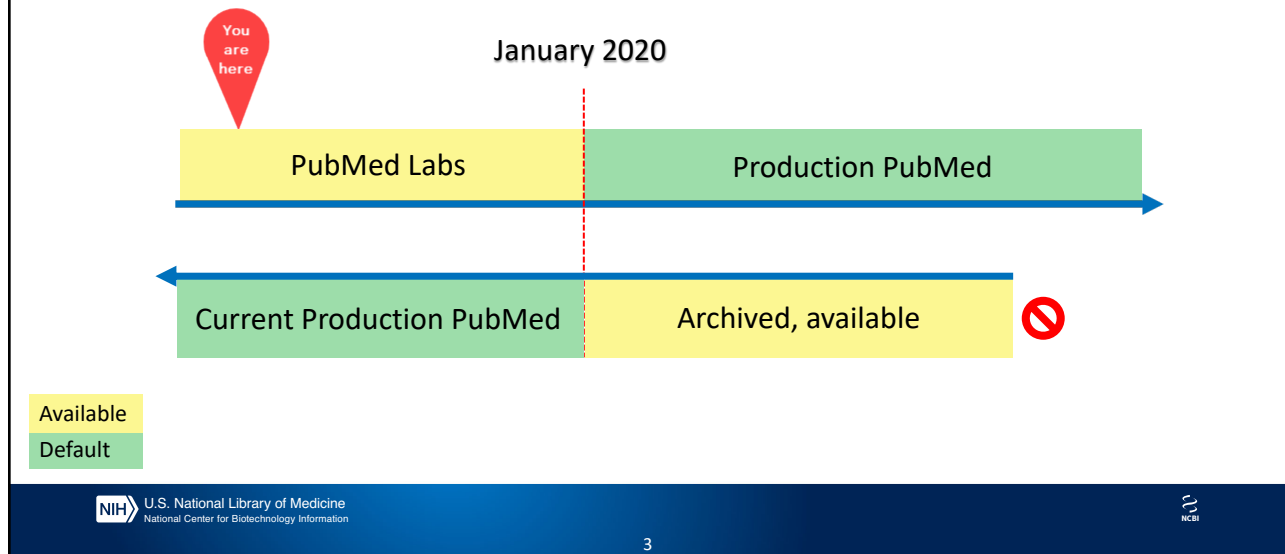
- Roadmap
- Goals
- Agile development
- Features in PubMed Labs
- Features still to come
- Responsive design
- Communication and planning

## New PubMed

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*We are transforming PubMed into a modern hub with a fast, reliable, and intuitive search that **connects** people to the world's leading sources of biomedical information.*

## Roadmap



## New PubMed: Goals

- ✓ Modern cloud architecture
- ✓ High-quality search
- ✓ Fast
- ✓ Reliable
- ✓ Modern experience
- ✓ Beloved

## Agile Development Model

- Release minimum viable product (MVP) with enough features for early users and an environment to capture feedback for future development
- Release new features frequently
- Pay continuous attention to technical excellence and good design

## Who did we talk to?

- Clinicians
- Researchers
- Professors
- Librarians
- Journalists
- Grant Writers
- Biocurators
- Health advocates
- PubMed team members

# Features

pubmed.gov/labs



7

# Previous & Next

- < Previous
- > Next
- Hover for details



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## Sidebar Menu

- Full Text Links
  - Publisher icon
  - PMC icon
  - Up to 5 Library icons
- Cite
- Add to Favorites
- Share
- Page Navigation

Review > Medicine (Baltimore), 95 (6), e2695 Feb 2016

### Complementary and Alternative Medicine Treatment Options for Otitis Media: A Systematic Review

Tal Marom, Paola Marchisio ... Susanna Esposito + expand  
PMID: 26871802 PMCID: PMC4753897 DOI: 10.1097/MD.0000000000002695

**Abstract**  
Otitis media (OM) has numerous presentations in children. Together with conventional medical therapies aimed to prevent and/or treat OM, a rising number of complementary and alternative medicine (CAM) treatment options can be offered. Since OM is common in children, parents may ask healthcare professionals about possible CAM therapies. Many physicians feel that their knowledge is limited regarding these therapies, and that they desire some information. Therefore, we conducted a literature review of CAM therapies for OM, taking into account that many of these treatments, their validity and efficacy and have not been scientifically demonstrated. We performed a search in MEDLINE (accessed via PubMed) using the following terms: "CAM" in conjunction with "OM" and "children. Retrieved publications regarding treatment of OM in children which included these terms included randomized controlled trials, prospective/retrospective studies, and case studies. The following CAM options for OM treatment in children were considered: acupuncture, homeopathy, herbal medicine/phytotherapy, osteopathy, chiropractic, xylitol, ear candling, vitamin D supplement, and systemic and topical probiotics. We reviewed each treatment and described the level of scientific evidence of the relevant publications. The therapeutic approaches commonly associated with CAM are usually conservative, and do not include drugs or surgery. Currently, CAM is not considered by physicians a potential treatment of OM, as there is limited supporting evidence. Further studies are warranted in order to evaluate the potential value of CAM therapies for OM.

**Figures**

FIGURE 1 Key locations  
FIGURE 2 Common chiropractic maneuvers  
FIGURE 3 Ear candling.

**Full Text Links**  
Wolters Kluwer  
PMC Full text  
NIH Library

**ACTIONS**  
Cite  
Favorites

**SHARE**  
Twitter  
Facebook  
LinkedIn

**PAGE NAVIGATION**  
< Title & authors  
Abstract  
Figures  
Similar articles  
Cited by  
References  
Publication types  
MeSH terms  
Substances  
LinkOut - more resources

## Results Page

- Results by Year graph
- Save, Email, Send to
- Best Match by default
- Abstract view
- Snippets with highlights
- Filters
- Advanced search
- Create alert
- Cite and Share

NIH U.S. National Library of Medicine  
National Center for Biotechnology Information

PubMed  
labs

koonin e crispr

Advanced search Create alert

Save Email ...

Sort by Best match Most recent

RESULTS BY YEAR

80 results

☐ Nucleic acid detection with CRISPR-Cas13a/C2c2.  
1 Gootenberg JS, et al. Science 2017. Among authors: Koonin EV. PMID 28408723  
The RNA-guided, RNA-targeting clustered regularly interspaced short palindromic repeats (CRISPR) effector Cas13a (previously known as C2c2) exhibits a "collateral effect" of promiscuous ribonuclease activity upon target recognition. We combine the collateral effect of Cas13a with isothermal amplification to establish a CRISPR-based diagnostic (CRISPR-Dx), providing rapid DNA or RNA detection with attomolar sensitivity and single-base mismatch specificity. ...

Cite Share

☐ Annotation and Classification of CRISPR-Cas Systems.  
2 Makarova KS and Koonin EV. Methods Mol Biol 2015. Review. PMID 25981466  
The clustered regularly interspaced short palindromic repeats (CRISPR)-Cas (CRISPR-associated proteins) is a prokaryotic adaptive immune system that is represented in most archaea and many bacteria. ...Comparative genomic analysis of the CRISPR-Cas systems in new archaeal and bacterial genomes performed over the 3 years elapsed since the development of this classification makes it clear that new types and subtypes of CRISPR-Cas need to be introduced. ...

Cite Share

Feedback

TEXT AVAILABILITY  
☐ Abstract  
☐ Free full text  
☐ Full text

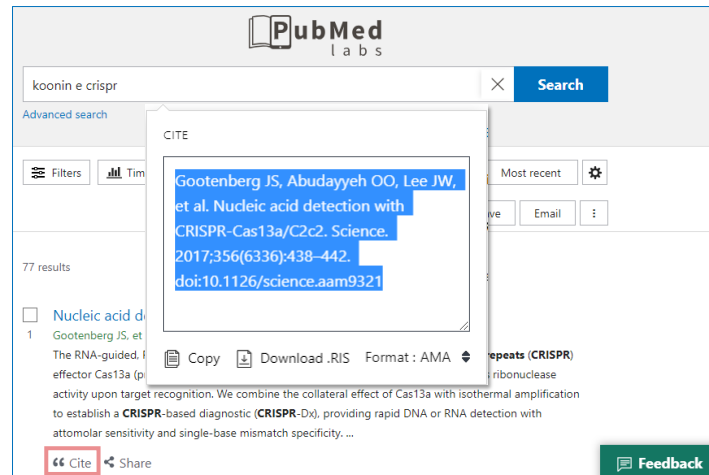
ARTICLE ATTRIBUTE  
☐ Associated data

ARTICLE TYPE  
☐ Books and Documents  
☐ Clinical Trial

# Cite

## Cite

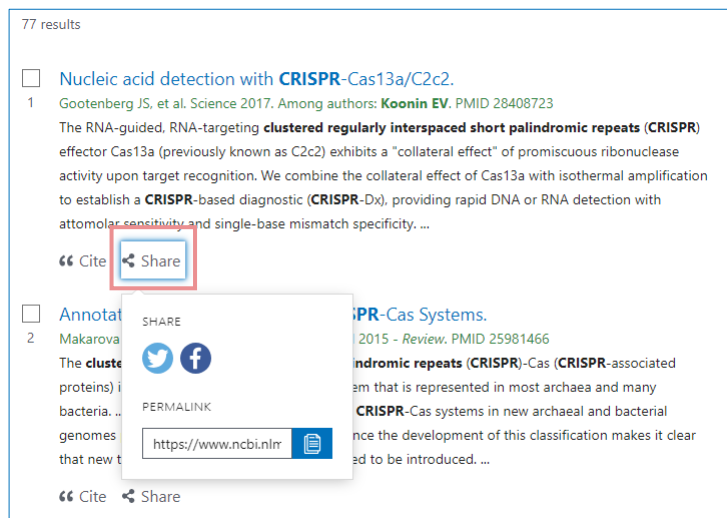
- Citation in AMA, MLA, APA, and NLM formats
- Copy citation text
- Download .RIS



# Share

## Share

- Share to Twitter or FaceBook
- Get the permalink



## Save and Email results

NIH U.S. National Library of Medicine  
National Center for Biotechnology Information

PubMed Labs

Search: koonin e crispr

Advanced search Create alert

Save Email ...

Sort by: Best match Most recent

RESULTS BY YEAR: 80 results 2 items selected x Clear selection

1 Nucleic acid detection with CRISPR-Cas13a/C2c2.  
Gootenberg JS, et al. Science 2017. Among authors: Koonin EV. PMID 28408723  
The RNA-guided, RNA-targeting clustered regularly interspaced short palindromic repeats (CRISPR) effector Cas13a (previously known as C2c2) exhibits a "collateral effect" of promiscuous ribonuclease activity upon target recognition. We combine the collateral effect of Cas13a with isothermal amplification to establish a CRISPR-based diagnostic (CRISPR-Dx), providing rapid DNA or RNA detection with attomolar sensitivity and single-base mismatch specificity. ...

2 Annotation and Classification of CRISPR-Cas Systems.  
Makarova KS and Koonin EV. Methods Mol Biol 2015 - Review. PMID 25981466  
The clustered regularly interspaced short palindromic repeats (CRISPR)-Cas (CRISPR-associated proteins) is a prokaryotic adaptive immune system that is represented in most archaea and many bacteria. ...Comparative genomic analysis of the CRISPR-Cas systems in new archaeal and bacterial genomes performed over the 3 years elapsed since the development of this classification makes it clear that new types and subtypes of CRISPR-Cas need to be introduced.

Feedback

## Save to File - Options

### Selection

- All results on this page
- All results
- Selection

### Format

- Summary
- RIS
- PMID List
- Abstract

otitis media treatment

Search

Advanced search

Save Email ...

Sort by: Best match Most recent

Save citations to file

Selection: All results on this page

Format: Summary

Create file Cancel



## Email - Options

### Selection

- All results on this page
- Selection

### Format

- Summary (Text)
- Summary
- Abstract (Text)
- Abstract

## More Actions Menu

### Send to

- Clipboard
- Collections

## Clipboard

Add up to 500 citations to a temporary Clipboard while reviewing results of one or more searches.

The screenshot shows the PubMed search results page for the query "influenza vaccine effectiveness". At the top, there is a search bar with the query and a "Search" button. Below the search bar, there are links for "Advanced search", "Create alert", and "Clipboard" (highlighted with a red arrow). Below these links are buttons for "Save", "Email", and a menu icon. To the right, there is a "Sort by" dropdown menu with "Best match" selected, and a "Most recent" option. Below the search bar, there is a notification box that says "2 items added to the Clipboard. Go to the Clipboard page." Below the notification box, there is a list of search results. The first result is titled "Efficacy and effectiveness of live attenuated influenza vaccine in school-age children" by Coelingh K, et al. The abstract text is visible below the title.

## Collections

Add up to 1,000 citations to a Collection in your My NCBI account while reviewing results of one or more searches.

The screenshot shows the PubMed search results page for the query "koonin e crispr". At the top, there is a search bar with the query and a "Search" button. Below the search bar, there are links for "Advanced search", "Create alert", and "Clipboard". Below these links are buttons for "Save", "Email", and a menu icon. To the right, there is a "Sort by" dropdown menu with "Best match" selected, and a "Most recent" option. Below the search bar, there is a dialog box titled "Add to collections". The dialog box has a "Selection:" dropdown menu with "Selection (2)" selected. Below the dropdown menu, there are two radio buttons: "Create a new collection" (selected) and "Add to an existing collection". Below the radio buttons, there is a text input field labeled "Name your collection:" with the text "Koonin" entered. At the bottom of the dialog box, there are "Add" and "Cancel" buttons.

## Filters

1. Click on Additional Filters
2. Select a category
3. Check the filters
4. Click "Apply"

☐ Abstract  
☐ Free full text  
☐ Full text

ARTICLE ATTRIBUTE

☐ Associated data

ARTICLE TYPE

☐ Books and Documents  
☐ Clinical Trial  
☐ Meta-Analysis  
☐ Randomized Controlled Trial  
☐ Review  
☐ Systematic Reviews

PUBLICATION DATE

☐ 1 year  
☐ 5 years  
☐ 10 years

Additional filters

Reset all filters

☐ Panel 7: **Otitis Media: Treatment and Complications.**  
 2 Schilder AG, et al. Otolaryngol Head Neck Surg 2017 - Review. PMID 28372534  
 Objective We aimed to summarize key articles published between 2011 and 2015 on the **treatment** of (recurrent) acute **otitis media**, **otitis media** with effusion, tympanostomy tube otorrhea, chronic suppurative **otitis media** and complications of **otitis media**, and their implications for clinical practice. ...Review Methods All types of articles related to **otitis media treatment** and complications between June 2011 and March 2015 were identified. ...  
 “ Cite Share

☐ **Acute otitis media.**  
 3 Dickson G. Prim Care 2014 - Review. PMID 24439877  
 One in 4 children will have at least 1 episode of acute **otitis media** (AOM) by age 10 years. AOM results from infection of fluid that has become trapped in the middle ear. ...Differentiating AOM from **otitis media** with effusion (OME) is a critical skill for physicians, as accurate diagnosis will guide appropriate **treatment** of these conditions. ...  
 “ Cite Share

☐ **Acute otitis media.**  
 4 Atkinson H, et al. Postgrad Med 2015 - Review. PMID 25913598  
 Acute **otitis media** (AOM) is a common problem facing general practitioners, paediatricians and otolaryngologists. This article reviews the aetiopathogenesis, epidemiology, presentation, natural history, complications and management of AOM. ...Although symptomatic relief is often enough for most children, more severe and protracted cases require **treatment** with antibiotics, especially in younger children...  
 “ Cite Share

☐ **Chronic otitis media.**

## My NCBI Custom Filters

NIH U.S. National Library of Medicine  
 National Center for Biotechnology Information

PubMed  
 labs

Search: adrenal incidentaloma

Advanced search Create alert

Save Email ...

Sort by Best match Most recent

MYNCBI FILTERS  
 All (765)  
 Pathology Journals (1)  
 Animals (12)  
 Heart (2)  
 Authors (0)

RESULTS BY YEAR

765 results

☐ Clinical Guidelines for the Management of **Adrenal Incidentaloma.**  
 1 Lee JM, et al. Endocrinol Metab (Seoul) 2017 - Review. PMID 28685511  
 An **adrenal incidentaloma** is an **adrenal** mass found in an imaging study performed for other reasons unrelated to **adrenal** disease and often accompanied by obesity, diabetes, or hypertension. ...The Korean Endocrine Society is promoting an appropriate practice guideline to meet the rising incidence of **adrenal incidentaloma**, in cooperation with the Korean **Adrenal** Gland and Endocrine Hypertension Study Group. ...  
 “ Cite Share

☐ Human studies on hypothalamo-pituitary-**adrenal** (HPA) axis.  
 2 Liyanarachchi K, et al. Best Pract Res Clin Endocrinol Metab 2017 - Review. PMID 29223281  
 The daily rhythm of the hypothalamo-pituitary-**adrenal** (HPA) axis is regulated by the central clock in the suprachiasmatic nucleus. ...A decrease in cortisol rhythm amplitude is seen in **adrenal** insufficiency, and

## Advanced Search and History

- Search specific fields
- Show index
- Build complex searches
- Powerful tool for advanced users

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## Search History

- View and Download search history
- View search details
- Compare results of various searches
- Download Search History
- Combine previous searches

History and Search Details Download Delete

Search	Actions	Details	Query	Results	Time
#5	...	>	Search: <b>#4 AND prevention and control[sh]</b>	808	14:34:32
#4	...	>	Search: <b>#1 OR #2 OR #3</b>	16,630	14:34:14
#3	...	>	Search: <b>hay fever</b>	15,459	14:34:02
#2	...	>	Search: <b>pollinosis</b>	14,810	14:33:55
#1	...	>	Search: <b>pollen allergies</b>	14,896	14:33:41

Showing 1 to 5 of 5 entries

22



## Search Details

- View search details and translation

History and Search Details				Download	Delete
Search	Actions	Details	Query	Results	Time
#5	...	▼	Search: <b>#4 AND prevention and control[sh]</b> ((((((("rhinitis, allergic, seasonal"[MeSH Terms] OR (("rhinitis"[All Fields] AND "allergic"[All Fields]) AND "seasonal"[All Fields])) OR "seasonal allergic rhinitis"[All Fields]) OR ("pollen"[All Fields] AND "allergies"[All Fields]) OR "pollen allergies"[All Fields]) OR (((("rhinitis, allergic, seasonal"[MeSH Terms] OR (("rhinitis"[All Fields] AND "allergic"[All Fields]) AND "seasonal"[All Fields])) OR "seasonal allergic rhinitis"[All Fields]) OR "pollinoses"[All Fields]) OR "pollinosis"[All Fields]) OR (((("rhinitis, allergic, seasonal"[MeSH Terms] OR (("rhinitis"[All Fields] AND "allergic"[All Fields]) AND "seasonal"[All Fields])) OR "seasonal allergic rhinitis"[All Fields]) OR ("hay"[All Fields] AND "fever"[All Fields]) OR "hay fever"[All Fields])) AND "prevention and control"[MeSH Subheading]	808	14:34:32

## Create Alert

- Save search
- Create alert
- Specify frequency
- Specify format



Email: **marie.collins2@nih.gov** (change)

Frequency:

Monthly

↕

Which day?

The first Sunday

↕

Report format:

Summary

↕

Send at most:

5 items

↕

☐ Send even when there aren't any new results

Optional text in email:

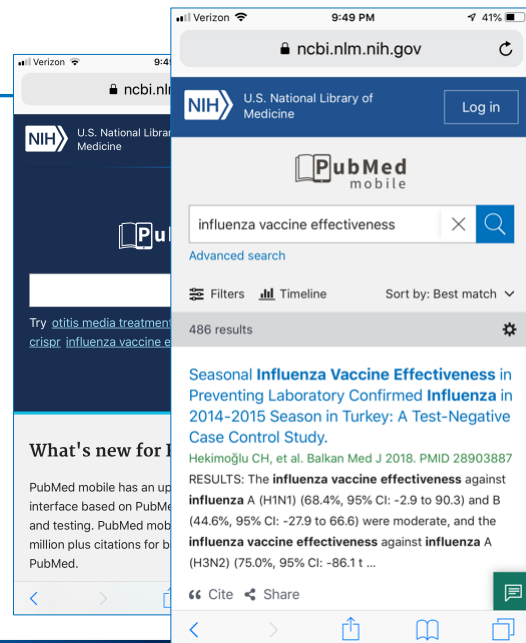
Save

Cancel

Feedback

## Responsive Design

- Log in to My NCBI
- Advanced search
- Filters
- Timeline
- Sort order
- Cite
- Share
- Publisher and PMC icons
- Outside Tool icons



## Features still to come

- Increased integration with My NCBI
  - Send to My Bibliography
- Search integration with other databases and tools
  - Search from MeSH
  - Search from NLM Catalog
  - Clinical Queries
  - Single Citation Matcher
  - Batch Citation Matcher
- Updated PubMed home page
- PubMed API

## Communication and Planning

### Timing

- In September new PubMed formally announced by NLM
- In January 2020 new PubMed is the default
- Both current and new PubMed run in parallel for several months

## Communication and Planning

Watch for Updates:

- PubMed Labs in the [NLM Technical Bulletin](#)
- PubMed Labs in the [NCBI Insights Blog](#)
- PubMed Labs [Home Page](#)

National Network of Libraries of Medicine (NNLM) Class  
[\*A New PubMed: Highlights for Information Professionals\*](#)

# Questions?

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